

CLAIMS

Please amend the claims as follows. Applicant presents a full set of claims showing markups of the claims with insertions and deletions indicated by underlining and strikethrough text (or double bracketing), respectively.

1. (Currently amended) A method of improving the efficiency of a fuel for an internal combustion engine which ~~comprises~~ consists essentially of adding to the fuel, prior to the introduction of the fuel to a vehicle or other apparatus comprising an internal combustion engine:

(a) cerium oxide and/or doped cerium oxide; and

(b) a detergent, ~~and, optionally,~~

~~(c) one or more fuel additives~~

wherein the detergent improves the efficiency of the fuel by improving the stability of the cerium oxide and/or doped cerium oxide in the fuel.

2. (Currently amended) A method according to claim 1 ~~which comprises adding~~ wherein the doped cerium oxide ~~which~~ is doped with a divalent or trivalent metal or metalloid which is a rare earth metal, a transition metal or a metal of group IIA, IIIB, VB or VIB of the Periodic Table.

3. (Original) A method according to claim 2 wherein the metal is a transition metal.

4. (Original) A method according to claim 3 wherein the metal is rhodium, copper, silver, gold, palladium, platinum, iron, manganese, chromium, cobalt, vanadium, zirconium or titanium.

5. (Previously presented) A method according to claim 2 wherein the metal is terbium, praseodymium, samarium, gadolinium, antimony, selenium, gallium, magnesium, beryllium, boron or calcium.

6. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide has a size not exceeding 1 micron.

7. (Original) A method according to claim 6 wherein the cerium oxide and/or doped cerium oxide has a size from 1 to 300nm.
8. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide has been coated with an organic acid, anhydride or ester or a Lewis base.
9. (Previously presented) A method according to claim 8 wherein the cerium oxide and/or doped cerium oxide has been coated with a dicarboxylic acid anhydride.
10. (Previously presented) A method according to claim 9 wherein the cerium oxide and/or doped cerium oxide has been coated with an alkenyl succinic anhydride.
11. (Original) A method according to claim 10 wherein the succinic anhydride is dodecenyl succinic anhydride, octadecenyl succinic anhydride or polyisobutenyl succinic anhydride.
12. (Previously presented) A method according to claim 1 wherein the fuel is diesel fuel.
13. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added with a solvent which is an aliphatic or aromatic hydrocarbon or an aliphatic alcohol.
14. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added to the fuel at a refinery.
15. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added at a fuel depot.

16. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added at a filling station forecourt.
17. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added together with one or more of a detergent, dehazer, anti-foaming agent, ignition improver, anti-rust agent, reodorant, anti-oxidant, metal deactivator, lubricity agent or demulsifier.
18. (Canceled)
19. (Previously presented) A method according to claim 1 wherein the detergent is a basic nitrogen-containing ashless detergent.
20. (Original) A method according to claim 19 wherein the detergent is a succinimide which has an average of at least 3 nitrogen atoms per molecule.
21. (Original) A method according to claim 20 wherein the succinimide is derived from an alkyl or alkenyl succinic acylating agent having at least 35 carbon atoms in the alkyl or alkenyl part and an alkylene polyamine mixture having an average of at least 3 nitrogen atoms per molecule.
22. (Original) A method according to claim 20 wherein the succinimide is derived from a polyisobutenyl succinic acylating agent obtainable from a polyisobutene having a number average molecular weight of 500 to 10,000 and an ethylene polyamine having an average composition from triethylene tetramine to pentaethylene hexamine.
23. (Original) A method according to claim 21 wherein the aliphatic chain of the succinimide has a molecular weight from 500 to 2500.

24. (Original) A method according to claim 23 wherein the aliphatic chain of the succinimide has a molecular weight from 750 to 1500.
25. (Previously presented) A method according to claim 18 wherein the cerium oxide and/or doped cerium oxide is added together with at least one of an anti-foaming agent, demulsifier or anti-rust agent.
26. (Previously presented) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added at a concentration not exceeding 20ppm.
27. (Original) A method according to claim 26 wherein the cerium oxide and/or doped cerium oxide is added in an amount not exceeding 10 ppm.
28. (Canceled)
29. (Currently amended) A fuel additive ~~which comprises~~ consisting essentially of cerium oxide and/or doped cerium oxide and a detergent, wherein the detergent improves the stability of the cerium oxide and/or doped cerium oxide in the fuel additive.
30. (Original) A fuel additive according to claim 29 wherein the concentration of cerium oxide and/or doped cerium oxide is from 0.1 to 10% by weight.
31. (Original) A fuel additive according to claim 30 wherein the concentration of cerium oxide and/or doped cerium oxide is from 0.5 to 5% by weight.
32. (Currently amended) A fuel additive according to claim 29 ~~which comprises~~ wherein the doped cerium oxide ~~which~~ is doped with a divalent or trivalent metal or metalloid which is a rare earth metal, a transition metal or a metal of group IIA, IIIB, VB or VIB of the Periodic Table.

33. (Previously presented) A fuel additive according to claim 29 wherein the detergent is a basic nitrogen-containing ashless detergent.
34. (Original) A fuel additive according to claim 33 wherein the detergent is a succinimide which has an average of at least 3 nitrogen atoms per molecule.
35. (Original) A fuel additive according to claim 34 wherein the succinimide is derived from an alkyl or alkenyl succinic acylating agent having at least 35 carbon atoms in the alkyl or alkenyl part and an alkylene polyamine mixture having an average of at least 3 nitrogen atoms per molecule.
36. (Original) A fuel additive according to claim 34 wherein the succinimide is derived from a polyisobutenyl succinic acylating agent obtainable from a polyisobutene having a number average molecular weight of 500 to 10,000 and an ethylene polyamine having an average composition from triethylene tetramine to pentaethylene hexamine.
37. (Original) A fuel additive according to claim 35 wherein the aliphatic chain of the succinimide has a molecular weight 500 to 2500.
38. (Original) A fuel additive according to claim 37 wherein the aliphatic chain of the succinimide has a molecular weight 750 to 1500.
39. (Currently amended) A fuel additive according to claim 29 which ~~also comprises~~ further consists of one or more of a dehazer, anti-foaming agent, ignition improver, anti-rust agent, reodorant, anti-oxidant, metal deactivator, lubricity agent or demulsifier.
40. (Currently amended) A fuel additive according to claim 39 which ~~emprise~~ further consists of one or more of an anti-foam agent, an anti-rust agent or a demulsifier.

41. (Currently amended) A fuel additive according to claim 29 which ~~comprises~~ further consists of a solvent which is an aliphatic or aromatic hydrocarbon or an aliphatic alcohol.
42. (Canceled)
43. (Previously presented) A method according to claim 1 wherein the detergent is an amide, amine, Mannich base or succinimide.
44. (Previously presented) A method according to claim 43, wherein the detergent is a hydrocarbyl-substituted amine or a hydrocarbyl-substituted amide.
45. (Previously presented) A fuel additive according to claim 29 wherein the detergent is an amide, amine, Mannich base or succinimide.
46. (Previously presented) A fuel additive according to claim 45, wherein the detergent is a hydrocarbyl-substituted amine or a hydrocarbyl-substituted amide.
47. (New) A method according to claim 1 wherein the cerium oxide and/or doped cerium oxide is added together with one or more fuel additives.